

MAKAROV, S.; KOVERDA, P.; KORCHAGIN, I.

Men with an inquisitive mind. Mast.ugl. 8 no.12:11-12 D '59.  
(MIRA 13:4)

1. Znatnyy izobretatel' Karagandinskogo basseyna (for Makarov).  
(Coal mines and mining--Technological innovations)

MAKAROV, S.

Four shift work conditions in a shielded stope. Mast. ugl. 4 no.12:  
27 D '55. (MLRA 9:3)

1. Brigadir shchitovikov shakhty imeni Voroshilova kombinata  
Kuzbassugol'.  
(Kusnetsk Basin--Coal mines and mining)

MAKAROV, Roman Romanovich; FIGURNOV, Konstantin Mikhaylovich  
[deceased]; ALIPOV, V.I., red.; KHARASH, G.A., tekhn.red.

[Clinical lectures on selected obstetric topics] Klinicheskie lektsii po izbrannym glavam akusherstva. Leningrad, Medgiz. No.1. 1963. 334 p. (MIRA 17:1)

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MAKAROV, Roman Romanovich, FIGURNOV, Konstantin Mikhaylovich  
[deceased]; GABELOV, A.A., red.

[Clinical lectures on selected obstetric topics] Klini-  
cheskie lektsii po izbrannym glavam akusherstva. Lenin-  
grad, Meditsina. No.2. 1965. 294 p. (MIRA 18:8)



ALIPOV, Viktor Ivanovich; MAKAROV, R.R., red.; LEBEDEVA, Z.V.,  
tekhn. red.

[Abortion, its harm and contraceptive agents] Abort, ego vred  
i protivozachatochnye sredstva. Leningrad, Medgiz, 1962. 39 p.  
(MIRA 15:9)

(ABORTION) (CONCEPTION--PREVENTION)

MAKAROV, Roman Romanovich

[Extra-uterine pregnancy] Vnematochnsia beremennost'. Leningrad,  
Medgiz, 1958. 127 p. (MIRA 12:5)  
(PREGNANCY, EXTRA-UTERINE)

*IMPRAC... 100*

FIGURNOV, I.M., professor, redaktor; MANDEL'SHTAM, A.E., professor, zasluzhennyy deyatel' nauk, redaktor; BOGOROV, I.I., professor, redaktor; PETROV-MASLAKOV, M.A., professor, redaktor; MAKAROV, R.B., dotsent, redaktor; TUMANOVA, Ye.S., dotsent, redaktor; RUDAKOV, A.V., redaktor; KHARASH, G.A., tekhnicheskiy redaktor

[Problems in the neurohumoral regulation of physiological and pathological processes of the sexual functions in women] Voprosy neiro-gumoral'noi regulatsii fiziologicheskikh i patologicheskikh protsessov zhenskoi polovoi sfery. [Leningrad] Gos. izd-vo med. lit-ry, Leningradskoe otd-nie, 1956. 146 p. (MLRA 10:3)

1. Chlen-korrespondent AMN SSSR (for Figurnov)  
(NERVOUS SYSTEM) (GENITOURINARY ORGANS--DISEASES)  
(HORMONES, SEX)

BASIN, Ya.N.; MAKAROV, R.A.; SELEZNEV, N.V.

Selecting optimum parameters of radioisotope devices used in  
thermophysical investigations. Inzh.-fiz. zhur. 8 no.2:257-  
262 F '65. (MIRA 18:5)

1. Institut stroitel'noy fiziki, Moskva.

MAKAROV, Rostislav Alekseyevich, kand. tekhn. nauk; SHTIPEL'MAN, Il'ya Moiseyevich, inzh.; BAGAYEV, Yuriy Petrovich, st. inzh.; PERFILOV, I.F., inzh., red.

[Electrotensiometer devices in construction] Elektrotensometricheskie pribory v stroitel'stva. Moskva, Gosstroizdat, 1962. 42 p. (MIRA 16:4)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. 2. Rukovoditel' laboratorii novykh fizicheskikh metodov issledovaniya Nauchno-issledovatel'skogo instituta stroitel'noy fiziki Akademii stroitel'stva i arkhitektury SSSR (for Makarov). 3. Nachal'nik otdela eksperimental'noy avtomatiki i sredstv izmereniy TSentral'nogo eksperimental'nogo konstruktorskogo byuro "Stroymekhavtomatika" Nauchno-issledovatel'skogo instituta organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu Akademii stroitel'stva i arkhitektury SSSR (for Shtipel'man). 4. Otdel eksperimental'noy avtomatiki i sredstv izmereniy TSentral'nogo eksperimental'nogo konstruktorskogo byuro "Stroymekhavtomatika" Nauchno-issledovatel'skogo instituta organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu Akademii stroitel'stva i arkhitektury SSSR (for Bagayev).

(Tensiometers)

S/091/61/000/022/047/076  
B101/B147

AUTHORS: Basin, Ya. N., Makarov, R. A.

TITLE: Device for measuring the weight by volume of concrete products

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 312, abstract 22K324 (Sb. "Radioaktivn. izotopy i yadern. izlucheniya v nar. kh-ve SSSR, v. 2, M., Gostoptekhizdat, 1961, 41 - 42)

TEXT: The construction of the *MOB-2* (IOV-2) apparatus is described. This apparatus is used for determining the weight by volume of structural elements consisting of homogeneous material both during their production and assembly and after completed construction. The apparatus operates on the principle of measuring scattered gamma radiation of a weakly active source (up to 10 mg-equ  $\text{CO}^{60}$ ). [Abstracter's note: Complete translation]

Card 1/1

MAKAROV, R.A., kand.tekhn.nauk

Experimental determination of frequency characteristics of  
tensometers used in investigating excavators. Sbor.trud.MISI  
no.26:146-149 '58. (MIRA 12:1)  
(Strain gauges) (Electronic measurements)

MAKAROV, R.A.

GOMOZOV, I.M., kand.tekhn.nauk; MAKAROV, R.A., kand.tekhn.nauk

Investigating the pressure distribution in supporting jacks of  
the EQL-15 excavator. Stroi.i dor.mashinostr.2 no.9:7-10 S '57 (MIRA 10:11)  
(Hydraulic jacks) (Excavating machinery)



MAKAROV, R. A.

MAKAROV, R. A.--"The Method of Experimental Investigation of Dynamic Processes in the Basic Parts of Excavators," Min Higher Education USSR. Moscow Order of Labor Red Banner Construction Engineering Institute V. V. Kuybyshev. Moscow, 1955. (Dissertation for the Degree of Candidate in Technical Science).

SO Knizhnyy letopis'  
No 2, 1956

GRAMENITSKIY, Yevgeniy Mikhaylovich; MAKAROV, P.V., red.; ONOSHKO,  
N.G., tekhn. red.

[Vital staining of cells and tissues under normal conditions  
and in pathology] Prizhiznennaya okraska kletok i tkanei v  
norme i patologii. Leningrad, Medgiz, 1963. 149 p.

(MIRA 16:10)

(STAINS AND STAINING (MICROSCOPY))

MAKAROV, P.V. (Leningrad, K-112. Nevskherkasskiy prospekt 40, kv.4)

Study of the nuclear structures of frog oocytes. Arkh. anat.  
gist. i embr. 45 no.11:53-61 N '63. (MIRA 1788)

1. Kafedra anatomii i gistol. (zav. - chlen-korrespondent  
AMN SSSR prof. P.V. Makarov) Leningradskogo gosudarstvennog  
universiteta.

SEMENOV, Severin Pavlovich; MAKAROV, P.V., prof., otv. red.;  
MATVEYEVA, V.V., red.

[Morphology of the vegetative nervous system and  
interoceptors] Morfologiya vegetativnoi nervnoi sistemy  
i interoretseptorov. Leningrad, Izd-vo Leningr. univ.,  
1965. 157 p. (MIRA 18:9)

1. Chlen-korrespondent AMN SSSR (for Makarov).

MAKAROV, P.V.

Autoradiographic study of protein-producing cells. Arkh. anat. gist.  
i embr. 48 no.4:3-16 Ap '65. (MIRA 18:6)

1. Kafedra anatomii i gistologii (zav. - chlen-korrespondent AMN  
SSSR prof. P.V. Makarov) Leningradskogo gosudarstvennogo ordena  
Lenina universiteta.

MAKAROV, F.V.

Nature of protoplasm changes responsible for the occurrence of  
cellular paralysis. Vest. LGU 20 no.9:80-94 '65.

(MIRA 18:6)

MAKAROV, P.V.

Cytochemical study of the silk glands in Chinese tussah moth.  
Tsitologiya 7 no.5:616-621 S-O '65. (MIRA 18:12)

1., Kafedra tsitologii i gistologii Leningradskogo universiteta.  
Submitted March 1, 1965.

MAKAROV, P.V.

Autoradiographic study of ovulating, layed and dividing eggs of  
a frog. Dokl. AN SSSR 155 no.6:1432-1434 Ap '64. (MIRA 17:4)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova.  
Predstavleno akademikom Ye.N.Pavlovskim.



SEMENOV, Severin Pavlovich; URAZOV, Ivan Grigor'yevich; ENTIN,  
Tamara Il'ichna; MAKAROV, P.V., prof., otv. red.;  
PETROVICHEVA, O.L., red.

[Manual for practical work in general histology with  
elements of microscopic anatomy] Posobie k prakticheskim  
zaniatiyam po obshchei gistologii s elementami mikrosko-  
picheskoi anatomii. Leningrad, Izd-vo Leningr. univ.,  
1964. 67 p. (MIRA 17:6)

MAKAROV, Petr Vasil'yevich, prof.; VASIL'YEV, Yu.A., red.

[Chemistry of the cell] Khimiia kletki. Leningrad, Ot-  
vo po rasprostraneniuiu politicheskikh i nauchnykh znanii  
RSFSR, 1963. 56 p. (MIRA 17:5)

1. Chlen-korrespondent AMN SSSR (for Makarov).

KORNEVNIKOV, Ye.M., veterinarnyy vrach; BABKINA, A.A., veterinarnyy vrach;  
DMITRIYEVA, P.M., veterinarnyy vrach; MAKAROV, . . .

Erysipelatous septicemia of turkeys. Veterinar ia 40 no. 4: 4-55  
Ag '63. (MIRA 1963:11)

1. Voronezhskaya veterinarnaya laboratoriya (for Kornevnikov,  
Babkina, Dmitriyeva). 2. Glavnyy veterinarnyy vrach Sotskhoz  
"II pyatiletke" Voronezhskoy oblasti (for Makarov).

MAKAROV, P.V.

Relation between the number of chromosomes and the volume of pronuclei  
in the zygotes of a horse ascarid. Dokl. AN SSSR 154 no.6:1434-1437 F  
'64. (MIRA 17:2)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova. Predstav-  
leno akademikom Ye.N.Pavlovskim.

MAKAROV, P.V. (Leningrad, K-112, Novoherkasskiy pr., 40, kv.4)

Some properties of osmium tetroxide as a fixator of cellular structures. Arkh. anat., gist. i embr. 42 no.6:111-119 Je  
162. (MIRA 15:6)

1. Kafedra anatomii i gistologii (zav. - chlen-korrespondent  
AMN SSSR prof. P.V. Makarov) Leningradskogo universiteta.  
(OSMIUM OXIDES)  
(STRAINS AND STRAINING (MICROSCOPY))

MAKAROV, P.V. (Leningrad, L-52, ul. Yegorova 8, kv.45)

Role of nucleic acids in the synthesis of cell proteins. Arkh.  
anat. gist. i embr. 40 no.5:3-17 Mr '61. (MIRA 15:4)

1. Kafedra anatomii i gistologii (zav. - chlen-korrespondent AMN  
SSSR prof. P.V.Makarov) Leningradskogo universiteta.  
(NUCLEIC ACIDS) (PROTEINS) (PROTOPLASM)

MAKAROV, P.V. (Leningrad)

Electron microscopy of the cell nucleus and chromosomes. Fiziol.  
zhur. 46 no. 4:44-61 Ap '60. (MIRA 13:10)  
(CHROMOSOMES) (CELL NUCLEI) (ELECTRON MICROSCOPY)

MAKAROV, P.V.

Cytochemical and autoradiographic study of seasonal changes in  
the ovicells of amphibians. TSitologiya 2 no.1:37-44 Ja-F '60.  
(MIRA 13:5)

1. Kafedra obshchey biologii Leningradskogo sanitarno-gigiyeni-  
cheskogo meditsinskogo instituta i Laboratorii tsitologii Lenin-  
gradskogo universiteta.  
(AMPHIBIA) (OVUM)



reports to be submitted to the  
1st Intl Congress of Histo-  
chemistry and Cytochemistry,  
Paris, France. 23 Aug-1 Sep '60

- EROSHI, V. Ya. "The nucleic acids of the nerve cell's nucleus and cytoplasm".
- KERKIN, M. V., VINOGRADOV, V. V. and SUBBOTIN, M. Ya. "Histocytochemistry of extramembranous connective tissue in pathological conditions".
- MAKAROV, P. I. "The aspects of the cytochemical study of the transition of the connective tissue into the neoplastic".
- MAKAROV, P. I. "The studies on the cell's nucleoproteins with the aid of phenol fractionation procedure".
- MAKAROV, P. I., A. A. KENDEL, M. M. KUDRUMOV, and V. V. VINOGRADOV. "The study of the ultrastructural fluorescence microscopy as a new field of histochemistry".
- PRIZVAVA, G. B. "Histochemical characteristics of aliphatic polyneuritis".
- SHAGOV, A. B. "The determination of sulphhydryl groups in the cytoplasm of the cells with the indicator (bromocyanatoltrametic acid) method".
- MAKAROV, P. I. "Cytochemical and autoradiographic analysis of the role of nucleic acids in the synthesis of cellular proteins".
- MAKAROV, P. I. "The reduction of the protein-cytoplasmic components of the cells in the tissue in the development of rheumatic process".
- POURNOI, A. E. "Histochemical contribution to the study of di-nucleophalo-hypophyseal secretion".
- PETROVICH, A. V. "Some mechanisms controlling the development of the connective tissue".
- (A summary of this report has been presented by the author at the 10th International Congress of the group I).
- Aspects of histochemistry and the nervous system
- MAKAROV, P. I. "The aspects of the exact histochemistry of the nervous system (this article is not yet known. It is listed by general subject matter under Group III)".
- RESNAY, M. A. "Histochemistry in experimental cancer chemotherapy".
- RODICH, G. I. "Comparative histochemistry of tumours differing in their function".
- SHAGOV, A. B. "The study of the cytochemical characteristics of different animal cells and their functional importance" and "Cytochemical and cytophysical peculiarities of nerve tissues biological organization".
- PRIZVAVA, G. B. "Histochemical examinations of connective tissue in the light of recent pathological studies".
- TASTANOVSKIY, A. A. "A comparative physical and chemical characteristic of procollagen and collagen".
- VALD, I. S. "Histochemical studies of the reactive connective tissue, changes observed in the course of development of induced sarcoma in rats".
- ZAKHAROV, I. B. "Proteinic and nucleic composition of nuclear structures".
- ZAKHAROV, I. B. and PRIZVAVA, G. B. "On the mechanism of the incorporation of amino acids in protein biosynthesis measured by the incorporation of labeled amino acids".

A Memorandum report presented at the  
Congress.

MAKAROV, P. V.

"The Problem of the Connection Between Nucleic Acids and Proteins  
in the Light of Cytological Analysis."

report submitted for the First Conference on the problems of Cyto and  
Histochemistry, Moscow, 19-21 Dec 1960.

Cytology Laboratory of Leningrad State University Imeni A. A. Zhdanov and the Chair of XXXX  
General Biology of Leningrad Sanitary-Hygienic Medical Institute, Leningrad.

GEUSEVITSKIY, I.V.; RAZUMOV, S.A.; MAKAROV, P.V., nauchnyy red.;  
VOROB'YEV, G.S., red.izd-va; GURDZHIYEVA, A.M., tekhn.red.

[Biology and religion] Biologiya i religiya. Leningrad, Ob-vo  
po rasprostraneniю polit. i nauchn.znaniy RSFSR. Leningr.otd-nie,  
1960. 70 p. (MIRA 13:7)

1. Chlen-korrespondent AMN SSSR (for Makarov).  
(Biology) (Religion)

MAKAROV, P.V.

Recent data from a cytochemical analysis of the developing eggs  
of *Ascaris equorum*. Trudy LSQMI 43:47-63 '59. (MIRA 13:5)  
(ASCARIDS AND ASCARIASIS) (OVUM)

MAKAROV, P.V.

Some features of modifications in nucleic acids and proteins in  
the early embryogenesis of animals. Trudy LSGMI 43:7-14 '59.  
(MIRA 13:5)

(NUCLEIC ACIDS)

(PROTEINS)

MAKAROV, P.V. (Leningrad, L-52, ul. Yegorova, 18, kv.45)

Among Chinese morphologists. Arkh.anat.gist.i embr. 37 no.10:121-125  
O '59. (MIRA 13:4)

(MORPHOLOGY)

The Distribution of Polysaccharides in the Course of *XV/20-120-2-54/63*  
Gametogenesis, Fertilization and Cleavage of the Egg  
of Parascaris Equorum

distributed in the cytoplasm. The pronuclei contain none. The amount of polysaccharides remains unchanged during the early prophase of the first cleavage. It increases during the late prophase and reaches a climax during the metaphase (figs. 1,8). The amount of polysaccharides in the two blastomeres remains high and increases in the course of further cleavages. There are 1 figure and 7 references, 2 of which are Soviet.

ASSOCIATION: Leningradskiy sanitarno-gigiyenicheskiy meditsinskiy institut (Leningrad Medical Institute for Hygiene and Sanitation)

PRESENTED: February 10, 1958, by Ye. N. Pavlovskiy, Member, Academy of Sciences USSR

SUBMITTED: February 8, 1958

Card ~~3~~

The Distribution of Polysaccharides in the Course of SOV, 20-120-2-54/63  
Gametogenesis, Fertilization and Cleavage of the Egg  
of Parascaris Equorum

although there are large amounts of them in the wall of the ovary. They apparently enter the oöcytes not at the apical but at the basal pole. With increasing growth the amount of polysaccharides in the oöcytes increases (figure 1,1). Towards the period of fertilization the cytoplasm of the oöcytes is overcrowded with them (figs. 1,3). At the study of the testicles no polysaccharides could be proved in the spermatogonia, spermatocytes or spermatids. Also completely developed spermatozoons have no polysaccharides. According to these features the parascaris differs from all other animals, for example from the mammals. In the course of fertilization the amount of polysaccharides decreases rapidly after the spermatozoon has entered (fig. 1,4). After the second maturity division is finished, and after the beginning of the pronucleus formation, polysaccharides appear in the egg again. The lipides are obviously their source now. Thus the zygote contains quite a lot of polysaccharides during the interphase which are regularly

Card 2/4



AUTHOR: Makarov, P. V. SOV/20-120-2-54/63

TITLE: The Distribution of Polysaccharides in the Course of Gametogenesis, Fertilization and Cleavage of the Egg of Parascaris Equorum (Dinamika polisakharidov v khode gametogeneza, oplodotvoreniya i drobleniya yaits Parascaris equorum)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 120, Nr 2, pp. 412-414 (USSR)

ABSTRACT: During the last years the attention of research-workers has been drawn to the problem of the localisation of polysaccharides in the cell (references 1-3). As far as the author is informed such a classical object as the parascaris equorum has never been investigated up to now. It is the aim of this paper to close that gap. In the introduction data and methodology are described, and later on the gametogenesis. Young oöcytes contain no polysaccharides. Only when they have reached a prismatic shape these substances appear on the radius around the rachis. The first inclusions become visible in the range above and below the nucleus. At that time no polysaccharides are proved in the rachis,

Card ~~1/3~~

MAKAROV, P.V. (Leningrad, ul. Yegorova, d. 18, kv. 45)

Recent data on the structure and properties of the cell nucleus.  
Arkh.anat.gist. i embr. 35 no.6:3-21 N-D '58. (MIRA 12:1)  
(CELL NUCLEUS,  
review (Rus))

MAKAROV, P.V.

30-1-34/39

AUTHOR: Kushner, Kh. F. , Doctor of Biological Sciences

TITLE: The Problem of Heredity and Variability (Problema nasledstvennosti i izmenchivosti) Conference Held at the Institute of Genetics (Konferentsiya v institute genetiki)

PERIODICAL: Vestnik AN SSSR, 1958, Vol. 28, Nr 1, pp. 127 - 129 (USSR)

ABSTRACT: The conference on this problem took place from October 8, to October 14, 1957, at the Institute for Genetics AN USSR. It was attended by collaborators of scientific institutes and by the representatives of 50 other institutions of the country, among them Vaskhnil, the University of Moscow, the Academy of Medical Sciences of the USSR, and many others. The total attendance amounted to more than 1000 persons. The following lectures were delivered:

- 1) T. D. Lysenko: On the rules governing the life of biological species and their importance in practice.
- 2) N. I. Nuzhdin: On the material carriers of heredity.
- 3) K. S. Sukhov: Genetical problems connected with virus research.
- 4) P. V. Makarov: Cytological and cytochemical changes of the gametes in the course of fecundation or impregnation
- 5) S. M. Sarkisyan: The participation of the organism of the mother and its cytoplasm in the determination of a num-

Card ~~24~~

MAKAROV, P.V.

Cytological and cytochemical investigations of developing eggs of  
*Parascaris equorum* [with summary in English]. Zhur.ob.biol. 19  
no.5:338-347 8-0 '58 (MIRA 11:10)

1. Kafedra obshchey biologii Leningradskogo sanitarno-gigiyenicheskogo  
meditsinskogo instituta i laboratoriya tsitologii Leningradskogo universi-  
teta.

(ASCARIDS AND ASCARIASIS)  
(DESOXYRIBONUCLEIC ACID)

MAKAROV, P. V.

MAKAROV, P.V. (Leningrad, ul. Yegorova, d.18, kv. 45)

Some aspects of the development of cytology in the U.S.S.R. during  
the last 40 years. Arkh.anat.gist. i embr. 34 no.4:25-36 J1-Ag '57.  
(MIRA 10:11)

(CYTOLOGY, history,  
in Russia (Rus))

MAKAROV, P. V.

at the International Congress on the Biology of Development. Ann.  
anat.gist. 1 embr. 34 no.3:121-122 My-Je '57. (MLR 10:10)

1. Adres avtora: Leningrad, ul. Kurakina, d.1/3, Leningradskiy  
santarno-gigiyenicheskiy meditsinskiy institut, kafedra biologii  
(BIOLOGY)

USSR / General Biology. Cytology. General Cytology. B

Abs Jour : Ref Zhur - Biologiya, No 4, 1959, No. 14298

Author : Kozlov, V. Ye.; Makarov, P. V.

Inst : Leningrad University

Title : A Review by K. Yu. Kostyukova of the  
Article "The Nature of Forming Processes in  
a Substance Isolated from Cells"

Orig Pub : Vestn. Leningr. un-ta, 1957, No 3, 137-138

Abstract : No abstract given

Card 1/1

*MAKAROV Petr Vasil'yevich*  
MAKAROV, Petr Vasil'yevich, prof.; BENYUMOV, G.M., red.; GUBIN, M.I.,  
tekhn.red.

[Some problems of modern cytology] "nekotorye problemy sovremennoi  
tsitologii. Moskva, Izd-vo "Znanie," 1957. 31 p. (Vsesoyuznoe  
obshchestvo po rasprostraneniю politicheskikh i nauchnykh znaniy.  
Ser. 8, no.40) (MIRA 11:2)

1. Chlen-korrespondent AMN SSSR. (for Makarov)  
(CYTOLOGY)



USSR / *Makarov, P.V.* General Biology. Physical and Chemical Biology B-1

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 190

Author : Makarov, P.V.

Inst : Not Given

Title : Some Problems in Cytochemistry of Nucleic Acids

Orig Pub : Uspekhi sovrem. biologii, 1956, 42, No 3, 289-303

Abstract : This is a review of studies devoted to the role of nucleic acids (chiefly ribonucleic acid RNA) in cellular activity. The question of inter-conversion of RNA and desoxyribonucleic acid DNA, of partial or total synthesis of nucleic acids, of the functional significance of RNA in the processes of cell growth and protein synthesis are clarified. The author considers Kaspersson's theory of the nucleus as the center of protein synthesis as insufficiently proven. He also considers concepts of existence of chromatin surrounding the nucleus, as well as the presence of a connection between the nucleus and the synthetic processes within the cell, not proven. The author cites data denoting the role of RNA as an energy substance, necessary to the normal flow of synthetic processes. At the same time a concept is presented of the role of RNA as

Card : 1/1 a matrix for protein formation. Bibl. 102 refs.

USSR/General Biology. General Physiology. Biochemistry, and Biophysics. B-1

Abs Jour: Ref. Zh.-Biol., No 9, 1957, 35024

vanced by the partisans of the constancy of DNA concerning the role of polyploid and polytenic tissues seems arbitrary and unconvincing to the author. However, he concludes with the assertion that "In adult organisms, the quantity of DNA in the nuclei, in constant environment, is evidently more or less stable; however, this circumstance can by no means serve as a support for the theory of the constancy of DNA..." A bibliography of 97 titles.

*MAKAROV, P.V.*

USSR/General Biology. General Physiology. Biochemistry, and Biophysics. B-1

Abs Jour: Ref. Zh.-Biol., No 9, 1957, 35024

Author : Makarov, P.V.

Inst :

Title : The Theory of Constancy of Desoxyribonucleic Acid in the Cell  
and a Criticism of the Theory.

Orig Pub: Uspekhi sovrem. biologii, 1956, 41, No 1, 3-25

Abstract: A critical review of the research on the content of DNA in the cell. The author maintains that the theory of the constancy of the content of DNA in the nuclei meets a number of difficulties connected with the fluctuation of the quantity of DNA in the cells of various tissues of the same animal, depending particularly on the physiological condition of the cell; it is shown in the disappearance of DNA in the course of cogenesis, in the pronucleus, and in several stages of the decay and embryological development of some animals. The decisions ad-

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-1-

USSR / General Biology. Individual Development.  
Reproductive Cells.

B-4

Abs Jour: Ref Zhur-Biol., No 18, 1958, 81000.

Abstract: elements of the tetrads of both strains are, at all times, connected together by crosspieces of a substance, containing DNA, which confirms the origin of the tetrads from a single caryosome. At the division maturity, the distribution of the chromatin is not always uniform. The spermatids usually contain about two chromosomes, but sometimes only one or three. The chromatin of spermatocytes contains not only DNA but also RNA. At the formation of spermatids, RNA emerges from the chromatin and afterwards from the body of the spermatid. The development of tetrads in oocytes occurs, on the whole, in the same manner as in spermatocytes. On the basis of these operations,

Card 3/4

USSR / General Biology. Individual Development.  
Reproductive Cells.

B-4

Abs Jour: Ref Zhur-Biol., No 18, 1958, 81000.

Abstract: work, that, in the author's opinion, seems to be the result of the coagulative action of the fixative. In the caryosome, a process of polarization of chromatin begins, that leads to the development of two, and later on four, corpuscles - tetrads. In the strain bivalens of the spermatocyte I, one chromosome and a considerable number of chromatin chunks are formed, that are gradually dissolved, in consequence of which the author discerns a diminution of chromatin, in a manner of its own. The caryosome stretches out and develops two polar masses of DNA, which are joined together by numerous crosspieces. In each pile, at first two and later on four sections are individualized. Two tetrads are obtained. The

Card 2/4.

USSR / General Biology. Individual Development.  
Reproductive Cells.

B-4

Abs Jour: Ref Zhur-Biol., No 18, 1958, 81000.

Author : Makarov, P. V.

Inst : Not given.

Title : Investigation of Gametogenesis in the Equine  
Ascarid in Connection with the Problem of the  
Reduction Division.

Orig Pub: Zh. obsheh. biologii, 1956, 17, No 3, 185-201.

Abstract: On the basis of new investigation of gametogenesis,  
there is described the preparation to the meiosis  
and the process of division in the maturing ascarid.  
In the nucleus of the spermatocyte I of the strain  
univalens, a single corpuscle is formed from the  
chromatin and is designated by the author as cary-  
osome. Later on there appear a few nucleoli, which  
fuse into a single nucleolus, and the nuclear net-

Card 1/4

*Chair of General Biology, Leningrad Sanitary Hygiene  
Medical Inst.*

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500043-6

MAKAROV, P. V.

"Cytological and cytochemical investigations of developing eggs of Ascaris"  
a paper presented at the International Congress on Biology of Growth, Brown  
University, Providence, R. I. from 23 to 25 July 1956.

MAKAROV, P. V.

N/5  
631  
.M2  
1956

OBSHCHAYA BIOLOGIYA; UCHEBNIK DLYA STUDENTOV MEDITSINSKIKH INSTITUTOV (GENERAL BIOLOGY, BY) V. V. MAKHOVKO I P. V. MAKAROV. 2. IZD. MOSKVA, MEDGIZ, 1956. 531 p. ILLUS. BIBLIOGRAPHICAL FOOTNOTES.



MACAROV, P.V. [Makarov, P.V.]

The cytology of the fecundation process (*Ascaris megalocephala*).  
Annalele biol 8 no.1:49-64 Ja-Mr '54.

MAKAROV, P. V.

Nematoda

Cytology of reproduction in *Ascaris megalocephala*; on the morphology of impregnation in accordance with Lysenko's theory of assimilation. Izv. AN SSSR Ser. biol. No. 1, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

MAKAROV, P.V.

[Fundamentals of cytology] Osnovy tsitologii. Moskva, "Sovetskaya  
nauka", 1953. 530 p. (MIRA 7:4)  
(Cells)

MAKAROV, P.V.

Critical analysis of reduction division; experimental-morphological investigation of spermatogenous cells in Amphibia. Arkh. anat., Moskva 19 no.1:48-70 Jan-Feb 52. (CIML 21:5)

1. Corresponding member of the Academy of Medical Sciences USSR, Professor. 2. Of the Department of Biology of Leningrad Sanitary-Hygienic Medical Institute and of the Laboratory of Cytology of Leningrad State University.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500043-6

1. MAKAROV, P. V.
  2. USSR. (600)
  4. Science
  7. New successes in Soviet biology. Stenogr. publ. letsii. Leningrad, 1951.
9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified.

MAKAROV, I. V.

"Physico-chemical Properties Of Tissues And Methods For their Study." (p. 147)  
Makarov, I. V. (Leningrad, 1948. 323 pages) Reviewed by Kremiansky, V. I.

SO: PROGRESS OF CONTEMPORARY BIOLOGY (Us. Sovrem. Biol) Vol. XXVII 1949 No. 1 (Jan.-Feb.)

MAKAROV, P. V.

24026

MAKAROV, P. V. Stroyeniye kletochnogo yadra i metody ego izucheniya.  
Trudy Akad. Med. Nauk SSSR, T. III, 1949, S. 20-25.

SO: Letopis, No. 32, 1949.

MAKAROV, P. V.

PA 11/49T56

USSR/Medicine - Nervous System  
Medicine - Irritation

Jul 48

"Changes in the Structure of the Nucleus of Ganglia  
Due to the Influence of Various Types of Irritations,"  
P. V. Makarov, Leningrad State U, 4 pp

"Dok Ak Nauk SSSR" Vol LXI, No 2

Describes effect of irritations on frog's ganglia,  
fixed by osmium tetroxide. Illustrates results by  
microphotographs. They establish dynamic nature of  
nuclear structure and neoplasm produced by various  
stimulants being reversible. Submitted 7 May 48.

11/49T56



MAKAROV, P. V.

Makarov, P. V. "The role of Soviet cytologists in the study of Gol'dzh's apparatus", Vestnik Leningr. un-ta, 1948, No. 12, p. 13-35, - bibliogr.: p. 33-35.

SC: U-4631, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 24, 1949).

MAKAROV, P. V.

PA 66T89

USSR/Medicine - Stains and Staining      Mar/Apr 1948  
Medicine - Bacteriology

"In Vivo Staining as a Method of Diagnosing Anaerobic Infections," P. V. Makarov, Chair of Gen Biol, Second Leningrad Med Inst, 4 pp

"Arkhiv Patologii" Vol X, No 2

Method is characterized as simple, requiring no special equipment other than microscope and renders bacteriological analysis possible in 1-1½ hours after obtaining the specimen. Submitted 1947.

66T89

YAKIMOV, P. V.

"The Transformation of the Substance of Chlorophyll in the Early Phases of Leaflet  
Telodermis." (p. 363) by Yakimov, P. V.

CC: Journal of General Biology, Contents of Vol. IX, No. 5 (Issues 1-5 of 1948).

MAKAROV, P. V.

"Formation of the Chromosomes De Novo under Experimental Conditions"

Dok AN, 54, No 2, 1946

| LIST AND END ORDERS                                     |  | PROCESSING AND PROPERTIES INDEX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | IMP. AND ATM. ORDERS |  |
|---------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------|--|
| <p>CA</p>                                               |  | <p>The distribution of thymonucleic acid in interkinetic nucleus. P. M. Makarov (Leningrad State Univ.). <i>Comp. rend. acad. sci. U.R.S.S.</i> 34, 60-71 (1946) (in English).—A method is proposed for preserving in permanent slides, the vital microscopic structure of the interkinetic nucleus without distortion. Small pieces of the tissue to be examd. were treated for 1-3 hrs. with 0.25 to 0.5% OsO<sub>4</sub> soln., washed, and then immersed in a 20% neutral HCHO soln. for 3-5 days. Later the tissue was embedded in paraffin and stained. Nuclei from a variety of animal and plant cells were studied by this method and the conclusion was reached that thymonucleic acid was probably contained in many nuclei in a colloidal dispersed state. The accuracy of the method was shown by finding cells of known nuclear structure and observing these same structures on preps. treated by the proposed method. Applications of these results to the theories of cell structure are briefly discussed and the conclusion was reached that the homogeneity of the nucleus is a real, rather than an apparent one.</p> |  | <p>1. Webster</p>    |  |
| <p>ASAC-56A METALLURGICAL LITERATURE CLASSIFICATION</p> |  | <p>RESEARCH</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                      |  |
| <p>RESEARCH</p>                                         |  | <p>RESEARCH</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                      |  |

MAKAROV, P. V.

"Demonstration of Paraneurotic Cell Alterations on Permanent Microscopic Preparations"  
Dok AN, 47, No 2, 1945

| 1ST AND 2ND ORDERS                                                                                                                                                                                                                                            |  |  |  |  |  |  |  |  |  | 3RD AND 4TH ORDERS |  |  |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--------------------|--|--|--|--|--|--|--|--|--|
| PROCESSES AND PROPERTIES INDEX                                                                                                                                                                                                                                |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |
| <p>BC</p> <p>A-4</p> <p>Action of radiation on protozoa, no. P. V. MARANO (Trans. physiol. Inst. Leningrad, 1936, 46, 100-110).—Material presents changes in the degree of dispersion of the contents of the nucleus and protoplasm of protozoa. J. W. A.</p> |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |
| <p>ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION</p> <p>1ST AND 2ND ORDERS</p> <p>3RD AND 4TH ORDERS</p> <p>5TH AND 6TH ORDERS</p>                                                                                                                          |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500043-6

Determining the sulfur in heavy petroleum products and additives  
by the iodometric method. Khim. i tekhn. topl. i masel 7 no.10:  
60-62 0'62 (MIRA 17:7)

1. Orenburgskiy neftemaslozavod.



MAKAROV, F.T.; PERSHINA, K.Ye.

Volumetric method for the determination of zinc in zinc  
dialkyl dithiophosphate. Khim. i tekhn. topl. i masel 8.  
no.10:62-64 0 '63. (MIRA 16:11)

1. Orenburgskiy neftemaslozavod.

MAKAROV, P.T.; IN'KOVA, N.M.; KLEMENT'YEVA, N.F.

Determination of phosphorus in heavy petroleum products  
and additives by means of the volumetric method during  
ashing. Khim. i tekhn. topl. i masel 8 no.5:65-66 My '63.  
(MIRA 16:8)

Determination of sulphur in heavy ... S/065/62/000/010/004/004  
E075/E136

ammoniacal medium in the presence of the precipitated  $\text{BaSO}_4$ .  
Subsequently the excess of potassium chromate is titrated  
iodometrically with a standard thiosulphate solution.

ASSOCIATION: Orenburgskiy neftemaslozavod  
(Orenburg Refinery)

Card 2/2

S/065/62/000/010/004/004  
E075/E136

AUTHORS: In'kova, N.M., Makarov, P.T., and Klement'yeva, N.F.

TITLE: Determination of sulphur in heavy petroleum products  
and additives by the iodometric method

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.10, 1962,  
60-62

TEXT: Deficiencies in the determination of S in heavy petroleum products by reacting barium chromate with sulphate ions were overcome by using  $\text{BaCl}_2$  and potassium chromate solutions instead of solid barium chromate, which is not soluble in water. This modification reduced the time of S determination by a factor of 5 to 6 compared with a standard gravimetric barium sulphate method ГOCT 1431-49 (GOST 1431-49). In the modified method an oil sample is ashed which converts any Ba present into  $\text{BaCO}_3$  and sulphur into  $\text{Na}_2\text{SO}_4$ . The latter is extracted with hot water and the extract made up to 100 ml. A part of the solution is treated with a standard  $\text{BaCl}_2$  solution and the excess barium treated with an excess of standard potassium chromate solution in weakly

Card 1/2

USSR / Farm Animals. Cattle. 2

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7325

Author : Kokovkin, I. I.; Makarov, P. T.  
Inst : Chkalov Scientific Research Institute of  
Dairy and Beef Cattle Husbandry

Title : The Effect of Some Feeds upon the Quality  
of Milk and Butter

Orig Pub : Tr. Chkalovskogo n.-i. in-ta molochno-myasn.  
skotovodstva, 1956, vyp. 10, 327-334

Abstract : As 20 kg of the Maxim type pumpkin were fed  
in addition to coarse feeds, the taste of  
milk improved. The butter which was then pro-  
duced, could be distinguished by a more in-  
tensive coloring and better taste. The iodine  
and Reichert-Meissel counts increased in milk  
fat. As 30 kg of the Pepo kind pumpkin were

Card 1/2

L 27083-66

ACC NR: AP6017430

creteness for the winking reflex was 210 msec. The relations between the critical interval of discreteness and P (at constant values of t and S = the area of irritation), t (at constant values of P and S), and S (at constant values of P and t) were similar: with increasing magnitude of any of these variables, the critical interval of discreteness decreased. Orig. art. has: 5 figures and 1 formula. [JPRS]

SUB CODE: 06 / SUBM DATE: 25Aug64 / ORIG REF: 010 / OTH REF: 003

Card 2/2 W

L 27083-66

ACC NR: AP6017430

SOURCE CODE: UR/0217/65/010/002/0297/0303

AUTHOR: Makarov, P. O.; Matoyan, D. S.ORG: Physiological Institute im. A. A. Ukhtomskiy, Leningrad State University im.  
A. A. Zhdanov (Fiziologicheskiy institut Leningradskogo gosudarstvennogo universiteta)

TITLE: Adequately and discretometry of the winking reflex

SOURCE: Biofizika, v. 10, no. 2, 1965, 297-303

TOPIC TAGS: reflex activity, animal physiology

ABSTRACT: The characteristics of two reactions (speech and the winking reflex) on irritation of the cornea of the eye with an air stream were compared. The air pressure (P) - duration of the stimulus (t) curves plotted on the basis of the speech and winking reflexes were of a hyperboloid type and could be described by equations  $P = a/t + b$ , where b is the rheobase and a is a constant. The thresholds of the winking reflex were considerably higher than those of sensation (as indicated by a speech response) at all values of t. The adequate chronaxy of irritation for winking and sensation inducing a speech response was 65-120 and 120-140 msec, respectively. The adequate magnitude of irritation corresponding to an energy minimum producing a response was 20-50 msec for winking and 100-140 msec for sensation (speech response). The latent period for winking at threshold stimuli for this reflex was 200 msec, independent of the characteristics of the stimulus. The minimum critical interval of dis-

Card 1/2

UDC: 577.3

MAKAROV, P.O.; SVYATAYA, L.P.

Adequatometry of the human olfactory analyzer. *Psichologiya* 11,  
no.6:1093-1098 '65. (MIRA 1966)

1. Biologo-pochvennyy fakul'tet Leningretskogo gosudarstvennogo  
universiteta imeni A.A.Zhdanova. Submitted December 21, 1964.



MAKAROV, P.O.; MATOYAN, D.S.

Adequatometry and discretometry of a winking reflex. Biofizika 10 no.2:  
297-303 '65. (MIRA 18:7)

1. Fiziologicheskiy institut imeni Ukhtomskogo Leningradskogo gosudarstven-  
nogo universiteta imeni Zhdanova.

1

During exposure to ultrasound, while the resting potential of motor responses decreased. Immediately after the threshold dropped to its original value and then rose to its original potential and duration of the motor response. The authors attribute the observed changes during exposure to ultrasound to a loss of membrane potential cells. (Ref. art. 11, 3 figures. [84])

Author: Michael Leningradskiy, G. I. Gerasimovskiy  
 Address: Leningrad, Department of Biophysics, Leningrad

1

ENGL: 00

SUB CODE: L36

1

OTHER: 00

ADD PRSS: 120

1995年12月10日

153

| Category              | Value | Unit |
|-----------------------|-------|------|
| 1. Total population   | 100   | %    |
| 2. Male population    | 50    | %    |
| 3. Female population  | 50    | %    |
| 4. Total population   | 100   | %    |
| 5. Male population    | 50    | %    |
| 6. Female population  | 50    | %    |
| 7. Total population   | 100   | %    |
| 8. Male population    | 50    | %    |
| 9. Female population  | 50    | %    |
| 10. Total population  | 100   | %    |
| 11. Male population   | 50    | %    |
| 12. Female population | 50    | %    |
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| 14. Male population   | 50    | %    |
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| 16. Total population  | 100   | %    |
| 17. Male population   | 50    | %    |
| 18. Female population | 50    | %    |
| 19. Total population  | 100   | %    |
| 20. Male population   | 50    | %    |
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| 22. Total population  | 100   | %    |
| 23. Male population   | 50    | %    |
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| 25. Total population  | 100   | %    |
| 26. Male population   | 50    | %    |
| 27. Female population | 50    | %    |
| 28. Total population  | 100   | %    |
| 29. Male population   | 50    | %    |
| 30. Female population | 50    | %    |
| 31. Total population  | 100   | %    |
| 32. Male population   | 50    | %    |
| 33. Female population | 50    | %    |
| 34. Total population  | 100   | %    |
| 35. Male population   | 50    | %    |
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| 37. Total population  | 100   | %    |
| 38. Male population   | 50    | %    |
| 39. Female population | 50    | %    |
| 40. Total population  | 100   | %    |
| 41. Male population   | 50    | %    |
| 42. Female population | 50    | %    |
| 43. Total population  | 100   | %    |
| 44. Male population   | 50    | %    |
| 45. Female population | 50    | %    |
| 46. Total population  | 100   | %    |
| 47. Male population   | 50    | %    |
| 48. Female population | 50    | %    |
| 49. Total population  | 100   | %    |
| 50. Male population   | 50    | %    |
| 51. Female population | 50    | %    |
| 52. Total population  | 100   | %    |
| 53. Male population   | 50    | %    |
| 54. Female population | 50    | %    |
| 55. Total population  | 100   | %    |
| 56. Male population   | 50    | %    |
| 57. Female population | 50    | %    |
| 58. Total population  | 100   | %    |
| 59. Male population   | 50    | %    |
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| 61. Total population  | 100   | %    |
| 62. Male population   | 50    | %    |
| 63. Female population | 50    | %    |
| 64. Total population  | 100   | %    |
| 65. Male population   | 50    | %    |
| 66. Female population | 50    | %    |
| 67. Total population  | 100   | %    |
| 68. Male population   | 50    | %    |
| 69. Female population | 50    | %    |
| 70. Total population  | 100   | %    |
| 71. Male population   | 50    | %    |
| 72. Female population | 50    | %    |
| 73. Total population  | 100   | %    |
| 74. Male population   | 50    | %    |
| 75. Female population | 50    | %    |
| 76. Total population  | 100   | %    |
| 77. Male population   | 50    | %    |
| 78. Female population | 50    | %    |
| 79. Total population  | 100   | %    |
| 80. Male population   | 50    | %    |
| 81. Female population | 50    | %    |
| 82. Total population  | 100   | %    |
| 83. Male population   | 50    | %    |
| 84. Female population | 50    | %    |
| 85. Total population  | 100   | %    |
| 86. Male population   | 50    | %    |
| 87. Female population | 50    | %    |
| 88. Total population  | 100   | %    |
| 89. Male population   | 50    | %    |
| 90. Female population | 50    | %    |
| 91. Total population  | 100   | %    |
| 92. Male population   | 50    | %    |
| 93. Female population | 50    | %    |
| 94. Total population  | 100   | %    |
| 95. Male population   | 50    | %    |
| 96. Female population | 50    | %    |
| 97. Total population  | 100   | %    |
| 98. Male population   | 50    | %    |
| 99. Female population | 50    | %    |
| 100. Total population | 100   | %    |

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Five years of the Department of Biophysics. Vest. LGU 19 no.21:  
159-160 '64 (MIRA 18s1)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500043-6

MAKAROV, F.O.; LINENKO, V.I.

Biophysics of the sense organs and psychopharmacology as exemplified by the action of some pharmacological preparations on acoustic and visual analysors in man. Vest. LGU 19 no.21: 95-108 '64 (MIRA 18:1)

MAKAROV, P.O.

Chronotope; interrelations of time and space in the neurodynamics  
of man. Vop. psikhol. 10 no.2:79-86 Mr-Ap '64.

(MIRA 17:9)

1. Kafedra biofiziki gosudarstvennogo universiteta, Leningrad.

MAKAROV, P.O.; LONSKIY, A.V.; SOKOV, B.N.

Effect of ultrasound on a single stretch receptor. Biofizika  
9 no.4:523-526 '64. (MIRA 18:3)

1. Kafedra biofiziki Leningradskogo gosudarstvennogo universiteta  
imeni Zhdanova.

L 13970-65

ACCESSION NR: AF1042461

moist chamber and fixed in the proper position for focused ultrasonic radiation. Ultrasonic intensity varied up to  $100 \text{ wt/cm}^2$ , duration ranged from 1 msec to 10 sec, and the frequency was 1 mc. The chamber with the preparation was thermostated at  $13^\circ\text{C}$ . Receptor electric activity was recorded by an ENO-1 oscillograph. Findings show that the functional state of the stretch receptor depends on ultrasonic intensity. The frequency of receptor impulses increases with low ultrasonic intensities and decreases with high ultrasonic intensities. An adequate stimulus in the stretch receptor can be produced by ultrasonic effect. The mechanism of ultrasonic stimulation of the stretch receptor is not known, but may be related to breaking of certain bonds, possibly van der Waals'. Orig. art. has: 5 figures

ASSOCIATION: Kafedra biofiziki Leningradskogo gosudarstvennogo universiteta. Dr. A. A. Zhdanova (Biophysics Department of the Leningrad State University)

SUBMITTED: 16 Jun 63

ENCL: 00

SUB CODE: LS

NR FILE NOY: 003

OTHER: 001

Card 2/2



13770-65

ACCESSION NUM: APL042181

S/0217/64/009/004/0523/0525

AUTHOR: Malanov, P. O.; Lonskiy, A. V.; Sokol, B. N.

TITLE: Ultrasonic effect on a single stretch receptor

SOURCE: Biofizika, v. 9, no. 4, 1964, 523-525

REPORT TAGS: ultrasonic effect, stimulus, mechanoreceptor, stretch receptor, frog, van der Waals bond

ABSTRACT: In an earlier investigation of ultrasonic dynamics it was demonstrated that an ultrasonic effect is incapable of producing an adequate stimulus in a nerve and a single nerve fiber. The present study was carried out to find whether an ultrasonic effect can produce an adequate stimulus in a mechanoreceptor, such as a stretch receptor. The electrical activity of a frog stretch receptor was investigated under various ultrasonic conditions. After the muscle with the nerve was removed from the frog, one sensory axon leading to the stretch receptor was isolated and all other nerve fibers were cut. The prepared muscle was covered with a physiological solution in a

Card 1/2

MAKAROV, P.G.; VESILAGIN, A...

Study of the application of a method for the determination of the  
in man by the method of analysis of the results of the study of  
no.5:100-104, 1964.

1. Kafedra biofiziki i fiziologii i fiziologii i fiziologii i fiziologii  
i Tsentral'naya nauchno-issledovatel'skaya laboratoriya i fiziologii i fiziologii  
meditsinskogo instituta.

MAKAROV, S.M.; BARTASH, A.N.; TARAN I.Ye.; KOKASHINSKIY, I.I.

Application of the gastric juice of horses in treating  
young animals. Veterinariia 40 no.4:65-66 Ap '63.  
(MIRA 17,1)

1. Starshiy veterinarnyy vrach Upravleniya veterinarii  
Ministerstva proizvodstva i zagotovok sel'skokhozyaystvennykh  
produktov BSSR (for Makarov). 2. Glavnyy veterinarnyy vrach  
Sovkhoza "Shatilki", Svetlogorskogo rayona, Gomel'skoy  
oblasti (for Bartash). 3. Glavnyy veterinarnyy vrach  
Polesskoy sel'skokhozyaystvennoy opytной stantsii (for  
Taran). 4. Glavnyy veterinarnyy vrach Svetlogorskogo  
proizvodstvennogo upravleniya Belorusskoy SSR. (for Kokashinskiy).

MAKAROV, P.O.

Problem of the reflection of moving and immobile optic stimuli.  
Vest.LGU 18 no.3:115-120 '63. (MIRA 16:2)  
(VISION)

MAKAROV, P.O.; LONSKIY, A.V.

Adequatometer for measuring the dynamic characteristics of  
vision and hearing in man. Biofizika 8 no.2:255-257 '63.

(MIRA 17:10)

1. Kafedra biofiziki Leningradskogo gosudarstvennogo universiteta  
im. A.A. Zhdanova.

MAKAROV, P.O.

Three forms of the relation of the hearing threshold to its  
duration. Biofizika 8 no.1:69-76 '63. (MIRA 17:8)

1, Leningradskiy gosudarstvennyy universitet imeni Zhdanova.

MAKAROV, P.O., prof.

Further studies of direct and reverse masking in the activity  
of the sense organs. Nerv. sist. no.4:71-75 '63  
(MIRA 18:?)

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